WHAT IS CLAIMED IS:

1. An image processing device, comprising a memory unit having a memory region for storing images of at least one screens, a memory control unit for performing an input system operation to write image data to the memory unit by using a first clock and a first image synchronizing signal and for performing an output system operation to output image data read out from the memory unit by using a second clock and a second image synchronizing signal, a clock generating unit for generating said second clock, and a synchronizing control unit for inputting said second clock and for outputting said second image synchronizing signal,

wherein said synchronizing control unit generates a third image synchronizing signal asynchronous to said first image synchronizing signal by dividing said second clock and a fourth image synchronizing signal with being synchronized to said first image synchronizing signal by using said second clock and selects one of said third image synchronizing signal and said fourth image synchronizing signal to output it as said second image synchronizing signal.

2. An image processing device according to claim 1, wherein said synchronizing control unit selects one of said third image synchronizing signal and said

fourth image synchronizing signal according to a vertical frequency of said first image synchronizing signal and outputs it as said second image synchronizing signal.

3. An image processing device according to claim 1, wherein said synchronizing control unit selects one of said third image synchronizing signal and said fourth image synchronizing signal according to a purpose for a use of the output image and outputs it as said second image synchronizing signal.

4. An image processing device, comprising a memory unit having a memory region for storing images of at least one screens, a memory control unit for performing an input system operation to write image data to the memory unit on by using a plurality of first clocks and a plurality of first image synchronizing signals synchronized to a plurality of input signals inputted to said plurality of input system signal processing units and for performing an output system operation to output image data read out from the memory unit by using a second clock and a second image synchronizing signal, a clock generating unit for generating said second clock, and a synchronizing control unit for inputting said second clock and for outputting said second image

synchronizing signal,

wherein said synchronizing control unit generates a third image synchronizing signal asynchronous to said first image synchronizing signals by dividing said second clock and fourth image synchronizing signals with being synchronized to said first image synchronizing signals by using said second clock and selects one of said third image synchronizing signal and said fourth image synchronizing signals to output it as said second image synchronizing signal.

5. An image processing device according to claim 4, wherein said synchronizing control unit selects one of said third image synchronizing signal and said fourth image synchronizing signals according to a vertical frequency of said first image synchronizing signals and outputs it as said second image synchronizing signal.

6. An image processing device according to claim 4, wherein said synchronizing control unit selects one of said third image synchronizing signal and said fourth image synchronizing signals according to a purpose for a use of the output image and outputs it as said second image synchronizing signal.

7. An image processing device according to claim

4, wherein said synchronizing control unit selects one of said third image synchronizing signal and said fourth image synchronizing signals according to presence or absence of a dynamic image or a proportion thereof in the plurality of input signals inputted to said plurality of input system signal processing units and outputs it as said second image synchronizing signal.

8. An image processing device according to claim 4, wherein said synchronizing control unit selects one of said third image synchronizing signal and said fourth image synchronizing signals according to uses or types of said plurality of input system signals and outputs it as said second image synchronizing signal.

Sub a1 9. An image processing device according to one of claims 4 to 8, further comprising means for outputting a request of setting or re-setting input image signals to signal sources for inputting signals to said plurality of input system signal processing units and for outputting a request of a synchronization to the second image synchronizing signal to an arbitrary input signal source which is asynchronous to said second image synchronizing signal selected to be output out of said third image synchronizing signal and said fourth image synchronizing signals.

10. An image processing device, comprising at least one signal input units to which video signals of a plurality of systems are inputted, a memory unit having a memory region for storing images of at least one screens, image processing means having at least one image display signal output units and synthesizing the video signals of said plurality of systems on said memory unit to output it to said signal output units, and control means for controlling said image processing means,

wherein said control means select a preferential video signal according to image characteristic information of the video signals of said plurality of systems and change the operation of said image processing means to one appropriate for the video signal of the preferential system.

11. An image processing device, comprising at least one signal input units to which video signals of a plurality of systems are inputted, a memory unit having a memory region for storing images of at least one screens, at least one image display signal output units, image processing means for synthesizing the video signals of said plurality of systems on said memory unit to output it to said signal output units, and control means for controlling said image processing means,

wherein said control means select a preferential video signal according to image characteristic information of the video signals of said plurality of systems and characteristic information of the image display unit connected to said signal output unit and change the operation of said image processing means to one appropriate for the video signal of the preferential system and for the image display unit connected to said signal output unit.

12. An image processing device, comprising at least one signal input units to which video signals of a plurality of systems are inputted, a memory unit having a memory region for storing images of at least one screens, at least one image display signal output units, image processing means for synthesizing the video signals of said plurality of systems on said memory unit to output it to said signal output units, and control means for controlling said image processing means,

wherein said control means, having communication means for outputting a request of changing image characteristics to at least one input video signals of said plurality of systems, select a preferential video signal according to image characteristic information of the video signals of said plurality of systems, change the operation of said image processing means to one

appropriate for the video signal of the preferential system, and output a request of changing image characteristics to those appropriate for the operation of said image processing means to video signals of at least one systems other than the video signal of the preferential system.

13. An image processing device, comprising at least one signal input units to which video signals of a plurality of systems are inputted, a memory unit having a memory region for storing images of at least one screens, at least one image display signal output units, image processing means for synthesizing the video signals of said plurality of systems on said memory unit to output it to said signal output units, and control means for controlling said image processing means,

wherein said control means, having communication means for outputting a request of changing image characteristics to at least one input video signals of said plurality of systems, select a preferential video signal according to image characteristic information of the video signals of said plurality of systems and characteristic information of the image display units connected to said signal output units, change the operation of said image processing means to one appropriate for the video signal of the preferential

system and the image display units connected to said signal output units, and output a request of changing image characteristics to those appropriate for the operation of said image processing means to video signals of at least one systems other than the video signal of the preferential system.

14. An image processing device, comprising at least one signal input units to which video signals of a plurality of systems are inputted, a memory unit having a memory region for storing images of at least one screens, at least one image display signal output units, image processing means for synthesizing the video signals of said plurality of systems on said memory unit to output it to said signal output units, and control means for controlling said image processing means,

wherein said control means select a preferential video signal according to arrangement conditions for a screen on which the video signals of said plurality of systems are output to said signal output units and change the operation of said image processing means to one appropriate for the video signal of the preferential system.

15. An image processing device, comprising at least one signal input units to which video signals of

a plurality of systems are inputted, a memory unit having a memory region for storing images of at least one screens, at least one image display signal output units, image processing means for synthesizing the video signals of said plurality of systems on said memory unit to output it to said signal output units, and control means for controlling said image processing means,

wherein said control means select a preferential video signal according to image characteristic information of the video signals of said plurality of systems and arrangement conditions for a screen on which the video signals of said plurality of systems are output to said signal output units and change the operation of said image processing means to one appropriate for the video signal of the preferential system.

16. An image processing device, comprising at least one signal input units to which video signals of a plurality of systems are inputted, a memory unit having a memory region for storing images of at least one screens, at least one image display signal output units, image processing means for synthesizing the video signals of said plurality of systems on said memory unit to output it to said signal output units, and control means for controlling said image processing

means,

wherein said control means select a preferential video signal according to image characteristic information of the video signals of said plurality of systems, arrangement conditions for a screen on which the video signals of said plurality of systems are output to said signal output units, and characteristic information of the image display units connected to said signal output units and change the operation of said image processing means connected to said signal output units to one appropriate for the video signal of the preferential system and the image display units connected to said signal output units.

17. An image processing device, comprising at least one signal input units to which video signals of a plurality of systems are inputted, a memory unit having a memory region for storing images of at least one screens, at least one image display signal output units, image processing means for synthesizing the video signals of said plurality of systems on said memory unit to output it to said signal output units, and control means for controlling said image processing means,

wherein said control means, having communication means for outputting a request of changing image characteristics to at least one input video signals of

said plurality of systems, select a preferential video signal according to image characteristic information of the video signals of said plurality of systems and arrangement conditions for a screen on which the video signals of said plurality of systems are output to said signal output units, change the operation of said image processing means to one appropriate for the video signal of the preferential system, and output a request of changing the image characteristics to those appropriate for the operation of said image processing means to video signals of at least one systems other than the video signal of the preferential system.

18. An image processing device, comprising at least one signal input units to which video signals of a plurality of systems are inputted, a memory unit having a memory region for storing images of at least one screens, at least one image display signal output units, image processing means for synthesizing the video signals of said plurality of systems on said memory unit to output it to said signal output units, and control means for controlling said image processing means,

wherein said control means, having communication means for outputting a request of changing image characteristics to at least one input video signals of said plurality of systems, select a preferential video

signal according to image characteristic information of the video signals of said plurality of systems, arrangement conditions for a screen on which the video signals of said plurality of systems are output to said signal output units, and characteristic information of image display units connected to said signal output units, change the operation of said image processing means to one appropriate for the video signal of the preferential system and the image display units connected to said signal output units, and output a request of changing the image characteristics to those appropriate for the operation of said image processing means to video signals of at least one systems other than the video signal of the preferential system.

Sub a2 19. An image processing device according to one of claims 10 to 18, wherein said control means comprise storing means for storing contents of the operation of said image processing means for which said preferential input video signal is selected and changed.

Sub a2 20. An image processing device according to one of claims 10 to 18, wherein the optimized operation of said image processing means is for an update cycle time of display screens of the display units in said control means.

Subq2] 21. An image processing device according to one of claims 10 to 13 and claims 15 to 18, wherein said image characteristics information referred to for selecting the preferential input video signal is update cycle time information of the input image and the optimized operation of said image processing means is for an update cycle time of display screens of the display units in said control means.

22. An image processing device according to one of claims 10 to 13 and claims 15 to 18, wherein said image characteristics information referred to for selecting the preferential input video signal is dynamic image or still image judgment information of the input image and the optimized operation of said image processing means is for an update cycle time of display screens of the display units in said control means.

Subq2] 23. An image processing device according to one of claims 10 to 13 and claims 15 to 18, wherein said image characteristics information referred to for selecting the preferential input video signal is use or type information of the input image and the optimized operation of said image processing means is for an update cycle time of display screens of the display units in said control means.

Sub a27

24. An image processing device according to one of claims 10 to 13 and claims 15 to 18, wherein said image characteristics information referred to for selecting the preferential input video signal is resolution information of the input image and the optimized operation of said image processing means is for a resolution of display screens of the display units in said control means.

25. An image processing device according to one of claims 10 to 13 and claims 15 to 18, wherein said image characteristics information referred to for selecting the preferential input video signal is gamma characteristic information of the input image and the optimized operation of said image processing means is a gamma correction on display elements of the display units in said control means.

26. An image processing device according to one of claims 10 to 13 and claims 15 to 18, wherein said image characteristics information referred to for selecting the preferential input video signal is color information of the input image and the optimized operation of said image processing means is a color correction for the display units in said control means.

Sub a27

27. An image processing device according to one

sub a27 of claims 10 to 13 and claims 15 to 18, wherein said image characteristics information referred to for selecting the preferential input video signal is brightness and contrast information of the input image and the optimized operation of said image processing means is brightness and contrast corrections for the display elements of the display units in said control means.

28. An image processing device, comprising input system image processing units for adjusting image qualities of a plurality of input systems, a memory unit having a memory region for storing images of at least one screens, a memory control unit for performing a write or readout operation of image data to or from the memory unit and for synthesizing images of a plurality of input systems to a single screen to output the signal, an output system image processing unit for adjusting image quality of said synthesized signal and for outputting it as an image display output, and an image quality control unit for controlling said input system image processing units and said output system image processing unit and for outputting the image display signal,

wherein said image quality control means, having correction characteristics for images of said plurality of input systems and a correction characteristic for a

display characteristic of the image display unit connected to the image quality control unit, select one of the correction characteristics for the images of said plurality of input systems and convert it to a correction characteristic synthesized with the correction characteristic for the display characteristic of said image display unit for batch-processing in said output system image processing unit.

29. An image processing device according to claim 28, wherein said image quality control unit selects one of the correction characteristics for the images of said plurality of input systems by using image quality information sampled in said plurality of input system image processing units and converts it to a correction characteristic synthesized with the correction characteristic for the display characteristic of said image display unit for batch-processing in said output system image processing unit.

30. An image processing device according to claim 28, wherein said image quality control unit selects one of the correction characteristics for the images of said plurality of input systems according to a purpose for a use of the output image and converts it to a correction characteristic synthesized with the correction characteristic for the display

characteristic of said image display unit for batch-processing in said output system image processing unit.

31. An image processing device according to claim 28, wherein said image quality control unit selects one of the correction characteristics for the images of said plurality of input systems according to uses or types of said plurality of the input system signals and converts it to a correction characteristic synthesized with the correction characteristic for the display characteristic of said image display unit for batch-processing in said output system image processing unit.

Sub a3 32. An image processing device according to one of claims 28 to 31, further comprising means for outputting a request of setting or re-setting input image signals to signal sources for inputting signals to said plurality of input system signal processing units and means for outputting a request of changing characteristics of the input image appropriate for said synthesized correction characteristic to an arbitrary input signal source which has not been selected for the synthesization with the correction characteristic for the display characteristic of said image display unit out of the correction characteristics for the images of said plurality of input systems.

Sub a3

33. An image processing device according to one of claims 1 to 32, wherein the image processing device is used as a signal processing unit of an image display device.

34. An image processing device according to one of claims 1 to 32, wherein the image processing device is used as a signal processing unit for an image display unit of a computer.

35. An image processing device according to one of claims 1 to 32, wherein the image processing device is used as a signal processing unit for an image display unit of a digital TV.

36. An image processing device according to one of claims 33 to 35, wherein said image display device has a liquid crystal display unit.

37. An image processing device according to one of claims 33 to 35, wherein said image display device has a display unit of a plasma display or an electric-charge emission type device.

Sub a3 38. An image processing device according to one of claims 33 to 35, wherein said image display device has a display unit of a reflection type device which

displays an image by reflecting light.

39. A computer readable medium on which a program is recorded for a computer to execute the operations of the image processing device according to one of claims 1 to 38.